U.S. Application No. 10/523,160 -- 6

## In the Abstract:

Replace the Abstract with the following amended Abstract:

## **ABSTRACT**

The invention relates a A procedure for the detection of stress state is disclosed, wherein ambulatory heart beat signal is measured. In the first phase segments are defined from heart beat signal with a chosen rule for segmentation. Then at least one segment describing a physiological state with elevated cardiac activity due to physical workload and/or increased metabolic rate is identified and excluded, if exists, and segments other than the excluded segments are detected for a potential stress state, which is identified using a predetermined rule for the heart beat signal.